

REMARKS/ARGUMENTS

Applicants thank the Examiner for noting that Claims 11-14 are allowable subject matter.

Applicants further thank the Examiner for acknowledging the receipt of papers submitted under 35 U.S.C. §110(a)-(d).

To address the Examiner's concerns, the claims are currently amended. Support for the amendments can be found on page 17, line 17 – page 18, line 16 of the originally filed specification.

Claims 22-24, which depend on Claim 7, are added.

No new matter is believed to have been added by the amendment.

The rejection of Claim 20 under 35 U.S.C. §112, first paragraph is obviated by the cancellation of Claim 20.

The rejection of Claims 7-10 and 15-21 under 35 U.S.C. §102b under Imazato (US 5,733,949) is respectfully traversed.

The present invention is directed to an antibacterial composition comprising elements

(a) at least one antibacterial salt compound,

(b) at least one acid group-having polymerizable monomer,

(c) at least one hydrophilic polymerizable monomer,

(d) water, and

(e) at least one basic compound selected from the group consisting of an alkali metal hydroxide, a strong basic acid salt not having an aromatic group, and primary, secondary or tertiary aliphatic amine wherein the tertiary amine is selected from the group consisting of trimethylamine, triethylamine, N-ethyldiethanolamine, N-n-butyldiethanolamine, N-lauryldiethanolamine, triethanolamine, (2-diethylamino)ethyl methacrylate, (2-dipropylamino)ethyl methacrylate, (3-dimethylamino)propyl methacrylate, (4-

dimethylamino)butyl methacrylate, (6-dimethylamino)hexyl methacrylate, (6-diethylamino)hexyl methacrylate, (10-dimethylamino)decyl methacrylate, N-methyldiethanolamine dimethacrylate, triethanolamine dimethacrylate, triethanolamine trimethacrylate, (2-dimethylamino)ethyl methacrylate, (2-diethylamino)ethyl methacrylate, (2-dipropylamino)ethyl methacrylate, (6-diethylamino)hexyl methacrylate, (6-dimethylamino)hexyl methacrylate, N-methyldiethanolamine dimethacrylate, and triethanolamin dimethacrylate. Applicants note the addition of component (e) leads to improved antibacterial property and storage stability of the antibacterial compound (see page 3, lines 26-34).

Imazato discloses that polymerizable monomers such as an antimicrobial monomer, a monomer containing at least one acidic group, and a monomer containing at least one alcoholic hydroxyl group, in combination with water and a polymerization catalyst comprise a composition for an antimicrobial adhesive (see Abstract). Imazato further discloses that additional components can be added (col. 6, lines 44-49). Examples of specifically disclosed components are 2-(dimethylamino)ethyl(meth)acrylate (DMAEA) (see col. 6, line 53), aromatic secondary or tertiary amines (see col. 7, lines 19-20) and tertiary amines (col. 7, lines 21).

Imazato is silent to the specific aliphatic tertiary amine compounds currently claimed and is also silent to aliphatic primary and secondary amine. Clearly, the aromatic amines are distinct from aliphatic amine. Furthermore, a broad disclosure of tertiary amines, without mention of its advantages, is insufficient to teach that the specific tertiary aliphatic amines currently claimed in the present invention lead to improved antibacterial properties and storage stability. Applicants have pointed out additional advantages of the aliphatic amines “as they form stable water-soluble salts with the acid group-having polymerizable monomer, especially with the phosphoric acid group-having polymerizable monomer in the

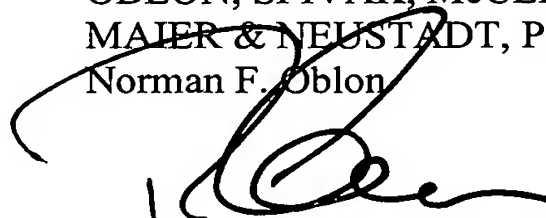
composition, and the salts are also highly adhesive to teeth” (see page 18, lines 6-10 of the original specification). Therefore, the currently amended claims do not read upon the cited reference of Imazato. Withdrawal of the rejection of Claim 7 is requested.

Withdrawal of the rejection of Claims 8-10 and 15-21, which depend on Claim 7 is also respectfully requested.

Applicants submit that the application is now in condition for allowance and earnestly solicit such notice of allowance.

Respectfully submitted,

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